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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,375	08/02/2001	Ray Whitney	01-471	3959

7590 08/16/2005

Law Offices of John D. Gugliotta, P.E., Esq.
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137 South Main Street
Akron, OH 44308

EXAMINER

NGUYEN, MY XUAN

ART UNIT	PAPER NUMBER
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2642

DATE MAILED: 08/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/921,375	WHITNEY, RAY	
	Examiner	Art Unit	
	My X. Nguyen	2642	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:
 - a. PTSN is used as an acronym for Public Switch Telephone Network (Background of the Invention, Page 2, Lines 5 and 8), examiner assumes applicant means to use PSTN.
 - b. The references the applicant uses should be included in an Information Disclosure Statement (IDS) and not in the body of the specifications (Background of the Invention, Page 3).
 - c. The acronyms PCMCIA (Page 1), PC (Page 3), and PCS (Page 5) should be fully described before first being used.

Appropriate correction is required.

Claim Objections

2. Claim 4 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 4 claims the same content as described in claim 1 of the invention, wherein a loudspeaker and microphone are coupled to a microprocessor via an audio interface block. Claim 4 therefore fails to further limit the subject matter of claim 1.

3. Claim 12 is objected to because of the following informalities: refers to an "input butter," examiner assumes applicant means "input buffer."

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Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, 4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,684,084 (Phillips) and further in view of U.S. Patent No. 6,778,519 (Harrell et al.) and U.S. Patent No. 5,646,635 (Cockson et al.).

For claims 1, 3, 4, and 6, Phillips teaches a radiotelephone card (modem) that communicates to a wireless communication system where the radiotelephone card (modem) is inserted into a standard PCMCIA slot within a lap-top computing device (Fig. 1, Col. 3, Lines 39-42), read as a PCMCIA card configuration associated with a laptop computer and further read as a modem integrated with the PCMCIA card. Phillips also teaches a plurality of pins that form a male connector to receive a corresponding female connector of the PCMCIA card (Col. 3, Lines 39-42) and the use of an antenna that is movably mounted to the radiotelephone card (modem) (Fig. 1, Col. 2, Lines 55-57). Phillips further teaches an audio jack provided for providing audio input and output to and from the radiotelephone card (modem) (Col. 3, Lines 65-67) and an

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audio input/output block coupled to a data processor (loudspeaker and microphone coupled to a microprocessor via an audio interface block) (Fig. 4).

What Phillips does not disclose explicitly is an antenna with a protective cap using a swivel joint and the implementation of a camera, microphone, and a loudspeaker.

As to the antenna, Cockson et al. teaches the use of an antenna that has a protective cap and also a swivel knuckle (joint) that rotates the antenna (Figs. 10-15, Col. 5, Lines 49-53).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to implement the feature with the system of Phillips because the said features of an antenna are old and well known in the prior art. Because the design of using a protective cap and a swivel joint is one of many variations of designs for antennas and is very well known, it would be beneficial if this particular design were implemented to the system of Phillips. The motivation to implement said antenna is to provide an efficient means to dynamically obtain a best signal and avoid damage to the antenna.

As to the features of implementation of a camera, microphone, and loudspeaker, Phillips discloses the use of an audio input and output jack. It is inherent to use a microphone as an audio input device and a loudspeaker as an audio output device. Furthermore, Harrell et al. discloses the use of a PCMCIA card interface of a portable computer to link to a plurality of peripherals (Col. 3, Lines 27-30), including a video capture device (Col. 8, Lines 1-6).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to implement the feature with the system of Phillips because the said features are well known in the prior art. It is inherent that a video capture device includes a camera. Because the utilization of a multifunctional PC card (PCMCIA) is well known, it would be beneficial to include a function of using a camera. The motivation to implement said camera is to provide the user an effective means to do multiple tasks with a single PCMCIA card.

6. Claims 2, 7, 8, 9, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips in view of Harrell et al. and Cockson et al. and further in view of U.S. Patent No. 6,088,648 (Shah et al.).

As to claims 2, 7, 8, 9, 10, and 11, Phillips has been discussed above. What Phillips does not explicitly teach is communicating to a satellite link and wireless relay communication system, a modem comprising at least three tuner cards for a multi-task video screen split, and a modem comprising nine tuner cards.

However, Shah et al. teaches a PCMCIA card modem capable of any type of wireless communication means, including satellite communication, for transporting data signals, voice signals, and video signals (transmission of video, voice, text, fax, and satellite television broadcast) (Col. 9, Lines 60-66, Col. 10, Lines 1-3). Harrell et al. teaches a PCMCIA card interface of a portable computer to link to a plurality of peripherals (Col. 3, Lines 27-30), including a video capture device, a facsimile machine, a television, and an audiovisual

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device (transmission include video, voice, text, fax, and viewing of television broadcast) (Col. 8, Lines 1-6). Shah et al. further teaches a display that can be divided into at least two regions or segments from the input signal of the PCMCIA card modem (Col. 5, Lines 20-22). It would be obvious to one with ordinary skill in the art to interpret at least two display segments as displaying a possibility of nine frames, and it is inherent that the frame size could be of equivalent dimensions.

It would have been obvious to one with ordinary skill in the art at the time the invention was made to implement the features of to the system of Phillips because the said features are old and well known in the prior art. Because wireless communications encompasses many different systems, using a satellite communication would be a preference based upon the user. Also, because multiple types of data are being transmitted through the wireless communication, it would be beneficial to display each data type separately into its own segment of a display. The motivation to implement the said features with the system of Phillips is to provide the user an efficient means to view all transmitted data in a compact manner to distinguish the differences of the incoming/outgoing data.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips in view of Harrell et al. and Cockson et al. and further in view of WO Foreign Patent 9953437A1 (Shobara et al.).

As to claim 5, Phillips has been discussed above. What Phillips does not explicitly teach is a PCMCIA enclosure that is removable. However, Shobara et al. discloses a frame kit for a PC card having a front lock engaging piece for

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engaging the panels with each other in their locked state (Abstract, Figs. 1-9). It is obvious to one with ordinary skill in the art a PC card broadly encompasses a PCMCIA card.

It would have been obvious to one with ordinary skill in the art at the time the invention was made to implement such a feature to the system of Phillips because it is old and well known in the prior art. The design of the frame of a PCMCIA card is user dependent, but since one type of configuration is to use front locks to keep the enclosure together, it would be beneficial to unlock the enclosure to access the components. The motivation to implement the feature of a removable enclosure is to easily disassemble the PCMCIA card to fix or maintain the components therein.

8. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips in view of Harrell et al., Cockson et al., and Shah et al. and further in view of U.S. Patent No. 5,428,671 (Dykes et al.) and U.S. Patent No. 6,917,646 (Chianale et al.).

As to claims 12 and 13, Phillips does not explicitly teach a data bus connected to a universal asynchronous receiver transmitter (UART) via a first bi-directional data path as claimed and the signals from the satellite link passing through a series of line amplifiers and switches. However, such standard connections and line amplifiers and switches are old and well known in the prior art as taught by Dykes et al. and Chianale et al., respectively.

Dykes et al. teaches a bidirectional connection between the computer and the UART including a parallel bus, a serial receive bus, a serial transmit bus, a

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microcontroller, a second parallel bus, a second serial transmit bus, a second serial receive bus, a digital signal processing (DSP) support module, wherein the microcontroller inherently aligns data in the proper configuration to be processed by voice, data, fax, and a video processor, and the DSP inherently performs all necessary operations on the data, including handshaking verification, through a series of built in algorithms in order to communicate to the modem (Fig. 2, Col. 6, Lines 51 to Col. 8, Line 63).

Chianale et al. teaches the use of multiple amplifiers interposed between a modem output and a transmit line and between the modem input and receive line (Fig. 1, Col. 2, Lines 44-52, Col. 3, Lines 32-34). Chianale further teaches the implementation of a switch in conjunction with the modem and line amplifiers (Fig. 2 Col. 4, Lines 8-11).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to implement such features with the system of Phillips because the features are old and well known in the prior art. The motivation to implement the said features is to provide an efficient means to transmitting and receiving the data from the satellite communication link to the wireless PCMCIA modem.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips in view of Harrell et al. and Cockson et al. and further in view of U.S. Patent No. 5,566,226 (Mizoguchi et al.).

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Regarding claim 14, Phillips has been discussed above. What Phillips does not explicitly teach is a modem hingedly attached as a free end of a cellular telephone unit being dimensionally configured to match PCMCIA standards.

However, Mizoguchi et al. does teach a portable telephone apparatus comprising of a subsidiary case pivotally connected to a lower end of the main case by a hinge (Fig. 2, Col. 3, Lines 24-25). Mizoguchi further teaches the subsidiary case has a size designed to the standards of a PCMCIA format (Fig. 2, Col. 3, Lines 46-50).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to have implemented such a feature in the system of Phillips because the said feature of Mizoguchi et al. is old and well known in the prior art. Because it is well known to implement a PCMCIA card format on a portable telephone unit, one with ordinary skill in the art could utilize the modem of the system, or any object capable of a PCMCIA configuration, in conjunction with the portable telephone. The motivation to implement such a feature with the modem is to provide a multifunctional cellular phone capable of many functions suiting the user's needs.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to My X. Nguyen whose telephone number is (571) 272-2835. The examiner can normally be reached on Monday through Friday at 8:00AM to 4:00PM.

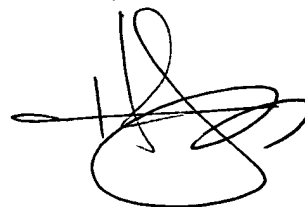
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on (571) 272-7488. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M.X.N.
August 9, 2005

HECTOR A. AGDEPPA
PATENT EXAMINER

A handwritten signature in black ink, consisting of a large, stylized 'H' followed by a series of loops and a long horizontal stroke extending to the left.